1607 1644/1600 pf 39

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 08/737,904H

CRF Processing Date: 11/1/2001

Edited by:

Verified by: (STIC staf

ENTERED

RECEIVED

NOV 13 2001

TECH CENTER 1600/2900

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

Examiner: The above corrections must be communicated to the applicant in the first Office Action! DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING DATE: 11/01/2001
PATENT APPLICATION: **US/08/737,904H** TIME: 19:01:02

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\11012001\H737904H.raw**


```
  3 <110> APPLICANT: Griffith, Irwin J
  4       Kuo, Mei-Chang
  5       Luqman, Mohammad
  7 <120> TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN ALLERGEN
  9 <130> FILE REFERENCE: IMI-040CP3
 11 <140> CURRENT APPLICATION NUMBER: 08/737,904H
 12 <141> CURRENT FILING DATE: 1996-11-20
 14 <150> PRIOR APPLICATION NUMBER: 08/106,016
 15 <151> PRIOR FILING DATE: 1993-08-13
 17 <160> NUMBER OF SEQ ID NOS: 61
 19 <170> SOFTWARE: PatentIn Ver. 2.0
W--> 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 1229
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Escherichia coli
 25 <220> FEATURE:
 26 <221> NAME/KEY: CDS
 27 <222> LOCATION: (40)..(942)
 29 <400> SEQUENCE: 1
 30 cgctatccct ccctcgtaca aacaaacgca agagcagca atg gcc gtc cag aag    54
 31                                              Met Ala Val Gln Lys
 32                                                1               5
 34 tac acg gtg gct cta ttc ctc gcc gtg gcc ctc gtg gcg ggc ccg gcc   102
 35 Tyr Thr Val Ala Leu Phe Leu Ala Val Ala Leu Val Ala Gly Pro Ala
 36                  10                  15                  20
 38 gcc tcc tac gcc gct gac gcc ggc tac acc ccc gca gcc gcg gcc acc   150
 39 Ala Ser Tyr Ala Ala Asp Ala Gly Tyr Thr Pro Ala Ala Ala Ala Thr
 40              25                  30                  35
 42 ccg gct act cct gct gcc acc ccg gct gcg gct gga ggg aag gcg acg   198
 43 Pro Ala Thr Pro Ala Ala Thr Pro Ala Ala Ala Gly Gly Lys Ala Thr
 44          40                  45                  50
 46 acc gac gag cag aag ctg ctg gag gac gtc aac gct ggc ttc aag gca   246
 47 Thr Asp Glu Gln Lys Leu Leu Glu Asp Val Asn Ala Gly Phe Lys Ala
 48      55                  60                  65
 50 gcc gtg gcc gcc gct gcc aac gcc cct ccg gcg gac aag ttc aag atc   294
 51 Ala Val Ala Ala Ala Ala Asn Ala Pro Pro Ala Asp Lys Phe Lys Ile
 52  70                  75                  80                  85
 54 ttc gag gcc gcc ttc tcc gag tcc tcc aag ggc ctc ctc gcc acc tcc   342
 55 Phe Glu Ala Ala Phe Ser Glu Ser Ser Lys Gly Leu Leu Ala Thr Ser
 56                  90                  95                  100
 58 gcc gcc aag gca ccc ggc ctc atc ccc aag ctc gac acc gcc tac gac   390
 59 Ala Ala Lys Ala Pro Gly Leu Ile Pro Lys Leu Asp Thr Ala Tyr Asp
 60              105                 110                 115
 62 gtc gcc tac aag gcc gcc gag ggc gcc acc ccc gag gcc aag tac gac   438
 63 Val Ala Tyr Lys Ala Ala Glu Gly Ala Thr Pro Glu Ala Lys Tyr Asp
 64          120                 125                 130
 66 gcc ttc gtc act gcc ctc acc gaa gcg ctc cgc gtc atc gcc ggc gcc   486
```

RAW SEQUENCE LISTING DATE: 11/01/2001
PATENT APPLICATION: US/08/737,904H TIME: 19:01:02

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\11012001\H737904H.raw

```
 67 Ala Phe Val Thr Ala Leu Thr Glu Ala Leu Arg Val Ile Ala Gly Ala
 68     135                 140                 145
 70 ctc gag gtc cac gcc gtc aag ccc gcc acc gag gag gtc cct gct gct   534
 71 Leu Glu Val His Ala Val Lys Pro Ala Thr Glu Glu Val Pro Ala Ala
 72 150                 155                 160                 165
 74 aag atc ccc acc ggt gag ctg cag atc gtt gac aag atc gat gct gcc   582
 75 Lys Ile Pro Thr Gly Glu Leu Gln Ile Val Asp Lys Ile Asp Ala Ala
 76                 170                 175                 180
 78 ttc aag atc gca gcc acc gcc gcc aac gcc gcc ccc acc aac gat aag   630
 79 Phe Lys Ile Ala Ala Thr Ala Ala Asn Ala Ala Pro Thr Asn Asp Lys
 80             185                 190                 195
 82 ttc acc gtc ttc gag agt gcc ttc aac aag gcc ctc aat gag tgc acg   678
 83 Phe Thr Val Phe Glu Ser Ala Phe Asn Lys Ala Leu Asn Glu Cys Thr
 84         200                 205                 210
 86 ggc ggc gcc tat gag acc tac aag ttc atc ccc tcc ctc gag gcc gcg   726
 87 Gly Gly Ala Tyr Glu Thr Tyr Lys Phe Ile Pro Ser Leu Glu Ala Ala
 88     215                 220                 225
 90 gtc aag cag gcc tac gcc gcc acc gtc gcc gcc gcg ccc gag gtc aag   774
 91 Val Lys Gln Ala Tyr Ala Ala Thr Val Ala Ala Ala Pro Glu Val Lys
 92 230                 235                 240                 245
 94 tac gcc gtc ttt gag gcc gcg ctg acc aag gcc atc acc gcc atg acc   822
 95 Tyr Ala Val Phe Glu Ala Ala Leu Thr Lys Ala Ile Thr Ala Met Thr
 96                 250                 255                 260
 98 cag gca cag aag gcc ggc aaa ccc gct gcc gcc gct gcc aca ggc gcc   870
 99 Gln Ala Gln Lys Ala Gly Lys Pro Ala Ala Ala Ala Ala Thr Gly Ala
100             265                 270                 275
102 gca acc gtt gcc acc ggc gcc gca acc gcc gcc gcc ggt gct gcc acc   918
103 Ala Thr Val Ala Thr Gly Ala Ala Thr Ala Ala Ala Gly Ala Ala Thr
104         280                 285                 290
106 gcc gct gct ggt ggc tac aaa gcc tgatcagctt gctaatatac tactgaacgt  972
107 Ala Ala Ala Gly Gly Tyr Lys Ala
108     295                 300
110 atgtatgtgc atgatccggg cggcgagtgg ttttgttgat aattaatctt cgttttcgtt 1032
112 tcatgcagcc gcgatcgaga gggcttgcat gcttgtaata attcaatatt tttcatttct 1092
114 ttttgaatct gtaaatcccc atgacaagta gtgggatcaa gtcggcatgt atcaccgttg 1152
116 atgcgagttt aacgatgggg agtttatcaa agaatttatt attaaaaaaa aaaaaaaaaa 1212
118 aaaaaaaaaa aaaaaaa                                               1229
121 <210> SEQ ID NO: 2
122 <211> LENGTH: 301
123 <212> TYPE: PRT
124 <213> ORGANISM: Escherichia coli
126 <400> SEQUENCE: 2
127 Met Ala Val Gln Lys Tyr Thr Val Ala Leu Phe Leu Ala Val Ala Leu
128   1               5                  10                  15
130 Val Ala Gly Pro Ala Ala Ser Tyr Ala Ala Asp Ala Gly Tyr Thr Pro
131             20                  25                  30
133 Ala Ala Ala Ala Thr Pro Ala Thr Pro Ala Ala Thr Pro Ala Ala Ala
134         35                  40                  45
136 Gly Gly Lys Ala Thr Thr Asp Glu Gln Lys Leu Leu Glu Asp Val Asn
```

RAW SEQUENCE LISTING DATE: 11/01/2001
PATENT APPLICATION: US/08/737,904H TIME: 19:01:02

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\11012001\H737904H.raw

```
137      50                  55                  60
139 Ala Gly Phe Lys Ala Ala Val Ala Ala Ala Ala Asn Ala Pro Pro Ala
140  65                  70                  75                  80
142 Asp Lys Phe Lys Ile Phe Glu Ala Ala Phe Ser Glu Ser Ser Lys Gly
143                  85                  90                  95
145 Leu Leu Ala Thr Ser Ala Ala Lys Ala Pro Gly Leu Ile Pro Lys Leu
146             100                 105                 110
148 Asp Thr Ala Tyr Asp Val Ala Tyr Lys Ala Ala Glu Gly Ala Thr Pro
149         115                 120                 125
151 Glu Ala Lys Tyr Asp Ala Phe Val Thr Ala Leu Thr Glu Ala Leu Arg
152     130                 135                 140
154 Val Ile Ala Gly Ala Leu Glu Val His Ala Val Lys Pro Ala Thr Glu
155 145                 150                 155                 160
157 Glu Val Pro Ala Ala Lys Ile Pro Thr Gly Glu Leu Gln Ile Val Asp
158                 165                 170                 175
160 Lys Ile Asp Ala Ala Phe Lys Ile Ala Ala Thr Ala Ala Asn Ala Ala
161             180                 185                 190
163 Pro Thr Asn Asp Lys Phe Thr Val Phe Glu Ser Ala Phe Asn Lys Ala
164         195                 200                 205
166 Leu Asn Glu Cys Thr Gly Gly Ala Tyr Glu Thr Tyr Lys Phe Ile Pro
167     210                 215                 220
169 Ser Leu Glu Ala Ala Val Lys Gln Ala Tyr Ala Ala Thr Val Ala Ala
170 225                 230                 235                 240
172 Ala Pro Glu Val Lys Tyr Ala Val Phe Glu Ala Ala Leu Thr Lys Ala
173                 245                 250                 255
175 Ile Thr Ala Met Thr Gln Ala Gln Lys Ala Gly Lys Pro Ala Ala Ala
176             260                 265                 270
178 Ala Ala Thr Gly Ala Ala Thr Val Ala Thr Gly Ala Ala Thr Ala Ala
179         275                 280                 285
181 Ala Gly Ala Ala Thr Ala Ala Ala Gly Gly Tyr Lys Ala
182     290                 295                 300
185 <210> SEQ ID NO: 3
186 <211> LENGTH: 20
187 <212> TYPE: PRT
188 <213> ORGANISM: Escherichia coli
190 <220> FEATURE:
191 <221> NAME/KEY: MOD_RES
192 <222> LOCATION: (7)
193 <223> OTHER INFORMATION: GAMMA_CARBOXYGLUTAMIC ACID
195 <220> FEATURE:
196 <221> NAME/KEY: MOD_RES
197 <222> LOCATION: (13)
198 <223> OTHER INFORMATION: GAMMA_CARBOXYGLUTAMIC ACID
200 <220> FEATURE:
201 <221> NAME/KEY: MOD_RES
202 <222> LOCATION: (16)
203 <223> OTHER INFORMATION: GAMMA_CARBOXYGLUTAMIC ACID
205 <220> FEATURE:
206 <221> NAME/KEY: MOD_RES
```

RAW SEQUENCE LISTING DATE: 11/01/2001
PATENT APPLICATION: **US/08/737,904H** TIME: 19:01:02

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\11012001\H737904H.raw**

207 <222> LOCATION: (20)
208 <223> OTHER INFORMATION: GAMMA_CARBOXYGLUTAMIC ACID
210 <400> SEQUENCE: 3
W--> **211 Ala Asp Ala Gly Tyr Thr Xaa Ala Ala Ala Ala Thr Xaa Ala Thr Xaa**
212 1 5 10 15
W--> **214 Ala Ala Thr Xaa**
215 20
218 <210> SEQ ID NO: 4
219 <211> LENGTH: 20
220 <212> TYPE: PRT
221 <213> ORGANISM: Escherichia coli
223 <220> FEATURE:
224 <221> NAME/KEY: MOD_RES
225 <222> LOCATION: (3)
226 <223> OTHER INFORMATION: GAMMA_CARBOXYGLUTAMIC ACID
228 <220> FEATURE:
229 <221> NAME/KEY: MOD_RES
230 <222> LOCATION: (10)
231 <223> OTHER INFORMATION: GAMMA_CARBOXYGLUTAMIC ACID
233 <400> SEQUENCE: 4
W--> **234 Ala Thr Xaa Ala Thr Pro Ala Ala Thr Xaa Ala Ala Ala Gly Gly Lys**
235 1 5 10 15
237 Ala Thr Thr Asp
238 20
241 <210> SEQ ID NO: 5
242 <211> LENGTH: 20
243 <212> TYPE: PRT
244 <213> ORGANISM: Escherichia coli
246 <220> FEATURE:
248 <400> SEQUENCE: 5
249 Ala Ala Ala Gly Gly Lys Ala Thr Thr Asp Glu Gln Lys Leu Leu Glu
250 1 5 10 15
252 Asp Val Asn Ala
253 20
256 <210> SEQ ID NO: 6
257 <211> LENGTH: 20
258 <212> TYPE: PRT
259 <213> ORGANISM: Escherichia coli
261 <400> SEQUENCE: 6
262 Glu Gln Lys Leu Leu Glu Asp Val Asn Ala Gly Phe Lys Ala Ala Val
263 1 5 10 15
265 Ala Ala Ala Ala
266 20
269 <210> SEQ ID NO: 7
270 <211> LENGTH: 16
271 <212> TYPE: PRT
272 <213> ORGANISM: Escherichia coli
274 <400> SEQUENCE: 7
275 Gly Phe Lys Ala Ala Val Ala Ala Ala Ala Asn Ala Pro Pro Ala Asp

RAW SEQUENCE LISTING DATE: 11/01/2001
PATENT APPLICATION: US/08/737,904H TIME: 19:01:02

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\11012001\H737904H.raw

```
276   1               5                  10                  15
279 <210> SEQ ID NO: 8
280 <211> LENGTH: 20
281 <212> TYPE: PRT
282 <213> ORGANISM: Escherichia coli
284 <400> SEQUENCE: 8
285 Asn Ala Pro Pro Ala Asp Lys Phe Lys Ile Phe Glu Ala Ala Phe Ser
286   1               5                  10                  15
288 Glu Ser Ser Lys
289              20
292 <210> SEQ ID NO: 9
293 <211> LENGTH: 20
294 <212> TYPE: PRT
295 <213> ORGANISM: Escherichia coli
297 <400> SEQUENCE: 9
298 Phe Glu Ala Ala Phe Ser Glu Ser Ser Lys Gly Leu Leu Ala Thr Ser
299   1               5                  10                  15
301 Ala Ala Lys Ala
302              20
305 <210> SEQ ID NO: 10
306 <211> LENGTH: 20
307 <212> TYPE: PRT
308 <213> ORGANISM: Escherichia coli
310 <400> SEQUENCE: 10
311 Gly Leu Leu Ala Thr Ser Ala Ala Lys Ala Pro Gly Leu Ile Pro Lys
312   1               5                  10                  15
314 Leu Asp Thr Ala
315              20
318 <210> SEQ ID NO: 11
319 <211> LENGTH: 20
320 <212> TYPE: PRT
321 <213> ORGANISM: Escherichia coli
323 <400> SEQUENCE: 11
324 Pro Gly Leu Ile Pro Lys Leu Asp Thr Ala Tyr Asp Val Ala Tyr Lys
325   1               5                  10                  15
327 Ala Ala Glu Gly
328              20
331 <210> SEQ ID NO: 12
332 <211> LENGTH: 20
333 <212> TYPE: PRT
334 <213> ORGANISM: Escherichia coli
336 <400> SEQUENCE: 12
337 Tyr Asp Val Ala Tyr Lys Ala Ala Glu Gly Ala Thr Pro Glu Ala Lys
338   1               5                  10                  15
340 Tyr Asp Ala Phe
341              20
344 <210> SEQ ID NO: 13
345 <211> LENGTH: 20
346 <212> TYPE: PRT
```

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 11/01/2001
PATENT APPLICATION: **US/08/737,904H** TIME: 19:01:03

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\11012001\H737904H.raw**

L:20 M:283 W: Missing Blank Line separator, <210> field identifier
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:913 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60

1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/08/737,904H

DATE: 10/26/2001
TIME: 12:58:55

Input Set : A:\seqlistcorrected(03-08-01).txt
Output Set: N:\CRF3\10262001\H737904H.raw

Does Not Comply
Corrected Diskette Needed

```
  3 <110> APPLICANT: Griffith, Irwin J
  4       Kuo, Mei-Chang
  5       Luqman, Mohammad
  7 <120> TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN ALLERGEN
  9 <130> FILE REFERENCE: IMI-040CP3
 11 <140> CURRENT APPLICATION NUMBER: 08/737,904H
 12 <141> CURRENT FILING DATE: 1996-11-20
 14 <150> PRIOR APPLICATION NUMBER: 08/106,016
 15 <151> PRIOR FILING DATE: 1993-08-13
 17 <160> NUMBER OF SEQ ID NOS: 61
 19 <170> SOFTWARE: PatentIn Ver. 2.0
```

ERRORED SEQUENCES

```
1173 <210> SEQ ID NO: 61
1174 <211> LENGTH: 20
1175 <212> TYPE: PRT
1176 <213> ORGANISM: Escherichia coli
1178 <400> SEQUENCE: 61
1179 Ala Asp Ala Gly Tyr Thr Pro Ala Ala Ala Ala Thr Pro Ala Thr Pro
1180   1               5                  10                  15
1182 Ala Ala Thr Pro
1183             20
E--> 1185 1
```

VERIFICATION SUMMARY DATE: 10/26/2001
PATENT APPLICATION: **US/08/737,904H** TIME: 12:58:56

Input Set : **A:\seqlistcorrected(03-08-01).txt**
Output Set: **N:\CRF3\10262001\H737904H.raw**

L:20 M:283 W: Missing Blank Line separator, <210> field identifier
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:913 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1185 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:61